

**IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION**

DEVELOPERS DIVERSIFIED OF)	
TENNESSEE, INC., n/k/a DDR CORP.,)	
)	
Plaintiff,)	
)	
v.)	Case No. 3:04-cv-00015
)	Judge Knowles
TOKIO MARINE & FIRE)	
INSURANCE CO.,)	
)	
Defendant.)	

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. Introduction and Background

This is a diversity action involving the partial collapse of a roof on a commercial building in Brentwood, Tennessee, which occurred on May 5, 2003. Early in the proceedings, the parties consented to have a Magistrate Judge preside over the action pursuant to 28 USC § 636 (c)(1).

The Court held a bench trial in this case from January 12-21, 2016. Thereafter, the parties submitted Proposed Findings of Fact and Conclusions of Law. Docket Nos. 396, 398. They also submitted post-trial briefs. Docket Nos. 397, 399, 400. Plaintiff DDR Corp. (“DDR”) filed a Reply in Opposition to Defendant Tokio Marine & Fire Insurance Company’s (“Tokio”) post-trial brief (Docket No. 403), and Tokio filed a “Post-Trial Memorandum in Response to the Post-Trial Submissions of Developers Diversified” (Docket No. 405).¹

¹ When Plaintiff initially filed this action, it was known as “Developers Diversified of Tennessee, Inc.,” and was often referred to as “DD.” At some point during the proceedings, it changed its name to “DDR Corp.”

Having reviewed the parties' Proposed Findings and Conclusions, their post-trial submissions, their arguments, the record, the exhibits received in evidence, including the agreed exhibits, and the testimony of the witnesses, and after considering their interests and demeanor, the Court enters the following Findings of Fact and Conclusions of Law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure. Except where the Court discusses different testimony on a specific issue, any contrary testimony on a specific matter has been rejected in favor of the specific fact found. Further, the Court omits from its recitation facts it deems to be immaterial to the issue presented. Finally, to the extent that a finding of fact constitutes a conclusion of law, the Court so concludes; to the extent that a conclusion of law constitutes a finding of fact, the Court so finds.

As discussed above, this action involves the partial collapse of a roof on a commercial building that was occupied by a Sports Authority ("SA") retail location. DDR was the landlord of the premises. At all relevant times, Tokio insured SA's merchandise pursuant to a written insurance policy. After the partial roof collapsed, SA submitted a claim for coverage, which Tokio adjusted and settled for \$1,926,888, and Tokio became subrogated to the rights of SA to the extent of that payment.

It became apparent that Tokio would seek money damages from DDR for the damaged merchandise. Instead of waiting to be sued by Tokio, DDR filed the instant declaratory judgment action in this Court, seeking a declaration that it is not liable to Tokio. Tokio thereafter filed a counterclaim seeking to recover the amounts it paid to SA.

DDR is an Ohio corporation with its principal place of business in Beachwood, Ohio. DDR is a subsidiary of Developers Diversified Realty Corporation, a self-administered and self-managed real estate investment trust (REIT) operating as a fully integrated real estate company

which acquires, develops, leases, and manages shopping centers. DDR is authorized to conduct business in the state of Tennessee. Joint Pretrial Order, Docket Entry (“D.E.” or “Docket No.”) 366, Stipulations, p. 30, ¶ 1.

Tokio is a New York corporation with its principal place of business in New York. Tokio is owned by Tokio Marine & Fire Insurance Company of Tokyo, Japan. Tokio is licensed and authorized to issue marine and general liability insurance policies in the state of Tennessee. Joint Pretrial Order, D.E. 366, Stipulations, p. 30, ¶ 3.

This Court has subject matter jurisdiction over this matter pursuant to 28 U.S.C. §1332(a), as DDR and Tokio are citizens of different states and the amount in controversy exceeds seventy-five thousand dollars (\$75,000), exclusive of costs and interest. Joint Pretrial Order, D.E. 366, Stipulations, p. 30, ¶ 5.

Venue is appropriate in this Court under 28 U.S.C. §1391 because the events giving rise to the claim occurred in this judicial district, in Brentwood, Williamson County, Tennessee. Joint Pretrial Order, D.E. 366, Stipulations, p. 3, ¶ 6.

On January 8, 2004, DDR commenced this action under 28 U.S.C. §2201, *et seq.*, seeking a declaration of its rights and obligations, if any, to Tokio. Joint Pretrial Order, D.E. 366, Stipulations, p. 30, ¶ 4.

On March 12, 2004, Tokio answered and counterclaimed to recover the amount it paid SA for the value of the merchandise pursuant to the Tokio Policy. *See Answer and Counterclaim*, D.E. 18.

On May 20, 2008, this Court granted DDR’s motion for summary judgment. *See D.E. 233.*

Tokio appealed to the United States Court of Appeals for the Sixth Circuit. *See D.E. 241.*

On February 7, 2011, the Sixth Circuit affirmed in part, reversed in part, and remanded. *See Developers Diversified of Tennessee, Inc. v. Tokio Marine Fire & Insurance Company*, 415 F. App'x. 653 (6th Cir. 2011) ("*Tokio I*").

In *Tokio I*, the Sixth Circuit cited the following background information:

Sports Authority entered into a lease agreement in January 1998 with Hendon Investments (Hendon) to lease retail space in a Brentwood, Tennessee, yet-to-be-built shopping center. Hendon assigned the lease to Service Hendon Cool Springs Associates (Service Hendon). Service Hendon retained an architectural firm, Pieper, O'Brien, Herr, Architects, Ltd. (Pieper) to design the shopping center, including Sports Authority's space. The lease provided that Sports Authority's building would be designed and constructed in general accordance with prototypical drawings and specifications submitted by Sports Authority. Pieper submitted drawings and specifications, which Sports Authority approved. Sub-contractor Holland Roofing installed the roof.

Construction of the shopping center was completed, and Sports Authority occupied the leased premises in 1998. Plaintiff DD entered into a purchase and sale agreement in July 1998 to acquire the shopping center from Service Hendon, although the transaction did not close until after construction was completed in April 2000. Pursuant to the agreement, Service Hendon assigned and DD assumed Sports Authority's lease. The "assignment and assumption of leases" between DD and Service Hendon provided that DD "assumes and agrees to perform all of the terms, covenants, obligations and conditions of the lease . . . in respect of the period from and after the date of this Assignment."

...

After acquiring the shopping center in April 2000, DD, through a property management company, retained Foresight Consulting, Inc., and CHM Roof Consultants to inspect the roof. Neither reported any problem or defect to DD.

Following a severe rainstorm in May 2003, part of the roof over Sports Authority's store collapsed and merchandise was damaged. Sports Authority's insurer, Defendant Tokio, paid approximately \$2 million for that loss and sought reimbursement from DD. DD then filed the instant declaratory judgment action. Tokio answered

and counter-claimed, asserting that DD breached the Lease by failing to keep, maintain and repair the roof, gutters and downspouts, and that Tokio suffered a loss of \$2,056,073 due to DD's acts, omissions, neglect and negligence.

The district court initially denied the parties' cross-motions for summary judgment. Subsequently, discovery revealed that DD had no role in the design or construction of the building or roof, and the parties again moved for summary judgment.

In its second summary judgment motion, Tokio's theories of liability were that DD had defaulted under the Lease and that the default caused the partial roof collapse. The Lease obligated the landlord to build in accordance with the specifications, and placed sole responsibility on the landlord to perform "all maintenance, replacement and repair to the roof." DD responded that it had not defaulted under the Lease as a matter of law because Tennessee law required notice of a defect and an opportunity to cure before liability could be imposed on a landlord, and that in any event, no action or inaction on its part caused the roof to collapse.

...

The district court held that a commercial lessor must have actual notice of defects for which it bears responsibility under the lease and a reasonable time to cure those defects before liability can be imposed, and granted summary judgment in DD's favor. The district court did not reach the causation issue.

Developers Diversified of Tennessee, Inc. v. The Tokio Marine & Fire Insurance Company, 415 F. App'x 653, 655-56 (6th Cir. 2011).

In its opinion, the Sixth Circuit determined that actual notice was not required, but that liability could be imposed if DDR had constructive notice of defects for which it bore responsibility under the Lease. The Sixth Circuit, therefore, remanded the case to this Court.

The Sixth Circuit's decision stated the "key provisions of the Lease" to be:

6. DRAWINGS AND SPECIFICATIONS.

A. Generally. Tenant's Building and the Site Improvements shall be constructed by Landlord . . . in accordance with the Approved Drawings and Specifications

* * *

F. Construction of the Building and Site Improvements/Incorporation of Materials and Components from Tenant's Prototypical Store Drawings and Specifications. Tenant's Prototypical Store Drawings and Specifications, the Approved Drawings and Specifications and the Approved Site Improvement Drawings and Specifications shall constitute a part of this Lease; provided however that Landlord shall construct Tenant's Building in accordance with the Approved Drawings and Specifications (or any revisions thereto approved pursuant to the provisions of Article 6.D hereof) and shall construct the Site Improvements in accordance with the Approved Site Improvement Drawings and Specifications (or any revisions approved pursuant to the provisions of Article 6.E hereof.) Notwithstanding the approval by Tenant of the Approved Drawings and Specifications or the Approved Site Improvement Drawings and Specifications, Landlord shall incorporate all of the materials and components specified in Tenant's Prototypical Store Drawings and Specifications into the Approved Drawings and Specifications and the Approved Site Improvement Drawings and Specifications and to the extent such materials and components are not incorporated or replaced by a substitute written approval by Tenant in its sole and absolute discretion, Tenant shall receive a credit to be applied toward Tenant Requested Change Orders and if no such Tenant Requested Change Orders are received or if Tenant's credits are not offset by Tenant Requested Change Orders, then Landlord shall pay Tenant an amount equal to the credit within sixty (60) days of the Date of Occupancy. . . .

12. LANDLORD'S REPRESENTATIONS, WARRANTIES AND COVENANTS.

Representations, Warranties and Covenants. Landlord hereby represents, warrants and covenants as follows:

* * *

(ii) Prior to and as a condition of the Date of Delivery of Possession, Landlord shall have substantially completed and prior to and as a condition to the Date of Occupancy Landlord shall have

completed Tenant's Building in accordance with the Approved Drawings and Specifications (and any modifications thereto requested and approved by Tenant in accordance with Article 6.D hereof) and shall have delivered to Tenant a final Certificate of Occupancy for Tenant's Building and the Site Improvements

* * *

14. REPAIRS AND MAINTENANCE

A. Tenant's Building. Tenant shall make and pay for all maintenance, replacement and repair necessary to keep Tenant's Building in a good state of repair and in tenantable condition except for the items set forth in Article 17 hereof (which are designated as Landlord's responsibility) and the following maintenance, replacement or repair which shall remain the Landlord's sole responsibility unless Tenant, its employees, contractors, agents or invitees, caused the need for such repair, in which event Tenant shall pay only its contributing factor if Landlord gives notice to Tenant of Landlord's reasonable allocation of the costs between Tenant and other parties to be named by Landlord in said notice, and Tenant reasonably agrees to such allocation. Said notice shall also include the percentage allocation to each such contributing party for each item of repair. In the event of a dispute between Landlord and Tenant with respect to said allocation, Landlord shall be entitled to pursue such remedies as are available under this Lease or at law.

(i) all maintenance, replacement and repair to the roof, slab . . . , outer walls, interior walls (to the extent of structural maintenance, replacement and repair) and structural portions of the Building . . . which shall be necessary to maintain the Building in a safe, dry and tenantable condition and in good order and repair . . .

* * *

(iv) all maintenance, replacement and repair due to the acts, omissions, neglect or negligence of Landlord, or any other owner, occupant or tenant in the Shopping Center and each of their employees, agents or contractors:

* * *

(vii) the costs of correcting defects in or inadequacies of the initial design or construction of Tenant's Building, the Site Improvements or the Common Areas or repair and replacement of any of the original materials or equipment in Tenant's Building, the Site Improvements or the Common Areas required as a result of such defects or inadequacies.

* * *

Landlord shall use reasonable and good faith efforts to stage, sequence, and perform any repair, maintenance or replacements to the Building to minimize the disruption of and interference with Tenant's business and operations and upon commencement of such repair, maintenance or replacement shall be continuously prosecuted and all repairs, maintenance and replacements to the Building performed by or on behalf of the Landlord shall be performed in a good, workmanlike and lien free manner and in compliance with all applicable legal and governmental and quasi-governmental requirements. . . .

* * *

17. GOVERNMENTAL REGULATIONS. Tenant shall observe and comply with all requirements, rules, orders and regulations of the federal, state and municipal governments or other duly constituted public authority affecting Tenant's Building, including the making of structural and non-structural alterations, insofar as they are due to Tenant's specific occupancy and not retail occupancy in general; provided, however, in the event such rules, orders and regulations shall . . . (b) require structural or non-structural changes which are not due to the specific use of the premises by Tenant and are due to the general retail nature of the use, then and in . . . such event[, the same shall be complied with by Landlord at its sole cost and expense. Tenant shall have the right, however, to contest, without cost to Landlord, the validity or application of any such rule, order or regulation required to be complied with by Tenant in accordance with the foregoing

39. SUCCESSORS AND ASSIGNS/COVENANTS RUN WITH THE LAND. The conditions, covenants and agreements contained in this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, successors, assigns and subtenants. All covenants and agreements of this Lease shall run with the land described in Exhibit "A."

The Sixth Circuit stated the positions of the parties in *Tokio I* as follows:

Tokio argues on appeal that DD defaulted under the terms of its Lease when DD (1) failed to maintain and repair the tenant's roof, as required by Lease ¶ 14(A)(i); (2) failed to remediate construction defects as required by Lease ¶ 14(A)(vii); (3) failed to insure that all maintenance performed was performed in a good, workmanlike manner, as mandated by ¶ 14(A); (4) refused to assume responsibility for its roof inspectors' negligence, as required by Lease ¶ 14(A)(iv); and (5) failed to comply with government regulations mandated by maintaining the building in Code violative state, contrary to Lease ¶¶ 17 and 14. Finally, Tokio asserts that DD is liable for the failure to construct the tenant's building in accordance with the agreed-to Lease specifications as required by Lease ¶¶ 6(F) and 12(A)(ii).

DD responds that it could not have defaulted under any of the above-mentioned Lease provisions as a matter of law because Tennessee law requires that Tokio provide DD notice of any defects in the building and an opportunity to cure those defects before DD can be liable for any default. DD further asserts that it cannot be held liable for the defaults of Service Hendon, the Lease assignor, and that, even assuming default, Tokio has failed to show causation. Neither party disputes that this is a breach-of-contract case and that the language of the Lease governs.

415 F. App'x at 658.

Importantly, the Sixth Circuit stated, "We express no opinion as to causation, and leave that question to the district court on remand." 415 F. App'x at 664.

The Sixth Circuit also held that DDR "cannot be held liable for Service Hendon's failure to construct the building in accordance with the Lease's precise specifications because the default occurred prior to the transfer of the lease interest and was not capable of repetition during [DDR's] ownership." 415 F. App'x at 669.

The Sixth Circuit also stated:

[G]iven the Lease's requirement that the building be constructed in accordance with the specifications "prior to and as a condition to

the Date of Occupancy,” App’x at 73 (Lease ¶ 12(A)(ii)), holding Developers Diversified liable for the original landlord’s failure to construct the building in a conforming manner would ignore the fact that the tenant occupied the building without complaint. Although not raised by either party, it is arguable that the tenant’s failure to object to the construction of the building at the time the promise came due – i.e., occupancy or a reasonable time thereafter – waived any claim for breach. The fact that the tenant had no obligation to inspect the roof in order to ensure that it was in good repair does not mean that it did not have some obligation to inspect the property to ensure that it conformed with the contractual specifications prior to occupancy. Of note, the Lease contains a provision allowing the tenant to terminate the Lease and collect liquid damages in the event that the building “shall not have been substantially completed in accordance with the Approved Drawings and Specifications ... and the requirements and provisions of this Lease,” which the tenant never invoked. *See* Lease ¶ 11(B).

415 F. App’x at 672-73.

The Sixth Circuit summarized its holding as follows:

Accordingly, we AFFIRM the district court’s order granting DD summary judgment as to Tokio’s claim that DD is liable for failure to construct the building in accordance with Lease ¶¶ 6(F) and 12(A)(ii). We REVERSE and REMAND for the district court to address the issues whether DD (1) failed to maintain and repair the roof as required by Lease ¶ 14(A)(i); (2) failed to remediate construction defects as required by Lease ¶ 14(A)(vii); (3) failed to ensure that all maintenance performed was performed in a good, workmanlike manner, as mandated by Lease ¶ 14(A), subparagraph 5; and (4) was required to assume responsibility for its roof inspectors’ negligence as required by Lease ¶ 14(A)(iv).

We also remand to the district court to decide in the first instance whether DD failed to comply with government regulations by maintaining the building in a Code-violative state, in contravention of Lease ¶¶ 17 and 14.

415 F. App’x at 669.

Following the remand of *Tokio I*, the parties engaged in additional discovery. The focus of the case essentially shifted to the causation and notice issues. The parties filed another round

of summary judgment motions (the third). Docket Nos. 286, 287, 295. The Court denied those Motions stating in part, “there are genuine issues as to material facts concerning causation.”

Docket No. 341, p. 11.

II. Findings of Fact

Some information regarding the layout of the roof will be helpful to an understanding of the issues raised in this action. The Appendix hereto is a copy of a “Roof Framing Plan” showing relevant aspects of the roof. (The Roof Framing Plan is Attachment 1 to Exhibit 366).

The front of the SA store faced west, while the back of the store faced east. The roof was sloped from front to back, so that water tended to flow to and collect at the eastern side of the roof. The outer perimeter of the building was surrounded by parapet walls, which extended above the roof line. Joist girders ran east to west and supported joists, which ran north to south, and which supported the roof. The joist girders were supported by columns that extended to the floor of the store, and, where the joist girders met the walls, they were embedded in the masonry walls.

Water drained from the roof through scuppers, which are essentially 8” by 16” holes at the base of the parapet walls. Water flowed into the scuppers, through the parapet walls, into open-topped “collection boxes,” and into vertical drain pipes, which carried the water to the ground. The open-topped condition of the collection boxes allowed for water to spill over the top of the boxes if the downspout became clogged. Docket No. 376, p. 23-24.

There were two scuppers on wall D6, one of which was at the point of the failure of the joist girder, which was the lowest point on the roof. Additionally, there were three scuppers on

wall D5, which were not marked on Attachment 1 to Exhibit 366, but have been marked on the Appendix.

Ballast, in the form of rocks, was spread on the roof, to minimize uplift. Scupper bars were placed in front of the scuppers, to keep the rocks from entering the scuppers.

The parties agree that the DC joist girder collapsed, at the point where the DC joist girder was attached to the D6 wall.

Tokio's theory, as set forth in the Joint Pretrial Order, was as follows:

Tokio Marine claims breaches of the commercial lease ("Lease") between Sports Authority and Developers Diversified of Tennessee, Inc. ("DDR"), including breaches under Articles 14 and 17 of the lease. All of the breaches are within the actual or constructive knowledge of DDR. Breaches included retainer bars blocking scupper openings, debris on the roof, and violation of Code of Ordinances of the city of Brentwood, Tennessee. Those breaches caused water to pond on the roof and proximately caused the roof collapse.

Docket No. 366, p. 2.

In 1998, during the original construction of the SA location, Holland Roofing of Nashville, Inc., installed a Carlisle Syntec ("Carlisle") single-ply, ballasted roof on the SA location pursuant to a sub-contract with the general contractor, R.J. Griffith. Docket No. 365-6, ¶14.

The roof of the SA building existing prior to May 5, 2003 was a ballasted roof system which included a roofing membrane and rock ballast on top of the membrane. Docket No. 365-6, ¶19.

Rock ballast on a ballasted roof system places weight on the roof membrane. This, in turn, minimizes the ability of the roof membrane to otherwise experience uplift or “blow off.” Without the weight of the rock ballast on the roof membrane of a ballasted roof, a roof membrane seam is more susceptible to opening up and the membrane material itself is more susceptible to splitting and tears, thereby permitting water infiltration. The function of a gravel stop (or “retainer bar”) installed on a ballasted roof system is to prevent the ballast or rock from washing off the roof. Docket No. 365-6, ¶22.

Holland is a roofing company that had worked on “hundreds” of roofs and installed the scupper retention bars; the bars were a standard bar manufactured by the roof manufacturer, Carlisle, and were what Holland typically installed on scuppers. Holland is a Carlisle-approved roof applicator. Sutton (Holland Roofing employee) Dep., p. 21, 57; Stark (President of Holland Roofing) Dep., p. 19-20, 42.

At the time of the partial roof collapse in May 2003, the original Carlisle roof was still under warranty. Docket No. 365-6, ¶15.

On December 20, 1999, SA executed a “Tenant’s Estoppel Certificate” – Exhibit #220. Docket No. 365-6, ¶16.

SA’s “Tenant’s Estoppel Certificate” certified that as of December 20, 1999, SA was unaware of any defaults by the current landlord including any knowledge of a failure to deliver the building in compliance with the original design and specifications. Garrett Dep. p. 109-111, Ex. 220.

SA accepted the construction of the building as being final and in accordance with the building specifications and design and did not terminate the lease. Garrett Dep. p. 47-49, 107-108; Hendon Dep. p. 115; Heidgerken Dep. p. 128.

SA never took the position that the building had not been completed and delivered in compliance with the original design specifications after SA accepted the building. Hendon Dep. p. 115-116, 125.

Tim Harrington, the City building inspector, signed the original certificate of occupancy on November 3, 1998, certifying that the building complied with all building code and ordinance requirements. Ex. 236. Harrington Dep. p. 103-104.

Following SA's rebuild of the roof, Mr. Harrington signed another certificate of occupancy on February 9, 2004, certifying that the building again complied with all code and ordinance requirements. Ex. 134.

On December 8, 2003, SA and DDR executed a Lease Termination Agreement with respect to the subject location ["the Release"]. In the Release, SA released DDR from any and all claims arising or existing in connection with the Lease. Docket No. 365-6, ¶26.

The original design and construction of the roof on the SA location called for the installation of gravel stops at the scupper openings. Docket No. 308, ¶22; Docket No. 232, (Memorandum op.), p. 7. 20. A Carlisle roofing manual detail depicts the use of a Carlisle perforated gravel retaining bar in a continuous gutter application. Docket No. 365-6, ¶24.

Grant Stout was employed by Pieper, O'Brien, Herr, ("Pieper") architects and was one of the original architects for the store location. Mr. Stout agrees that with a single-ply, ballasted roof, such as on the SA location, it is necessary to have protection in front of scuppers, or down-spout openings, to prevent rock or ballast or other material from blocking the down-spouts from the roof. Docket No. 308, ¶24; Docket No. 232.

Holland's standard construction practice at the time of the construction of the SA roof was to install Carlisle perforated ballast retainer bars in front of scupper openings on Carlisle

roofs. Holland had no knowledge of difficulties in the use of Carlisle perforated bars. Carlisle and Holland performed an inspection of the roof and all components in June 1999 and the Carlisle technical representative found the roof installation acceptable and appropriate for warranty. Docket No. 12, ¶21; Document No. 232, p. 7.

Holland's general manager of construction, Curtis Simon, believes that with a single-ply, ballasted roof, such as on the SA location, it is necessary to have protection in front of scuppers, or down-spout openings, to prevent rock or ballast or other material from blocking the down-spouts from the roof. Holland was an authorized installer of Carlisle roofs and would inspect roofs with a Carlisle representative for approval prior to issuance of a warranty. The representatives of the companies involved in the roof inspections, including CHM and Foresight, agreed that some form of scupper guard is needed for the ballasted roof on the SA location. Docket No. 308, ¶23.

The Sansone Group ("Sansone") is a property management firm with its St. Louis area office located at 120 South Central in Clayton, Missouri. Docket No. 365-6, ¶21.

Over the course of its ownership, DDR (via its property-management agent, Sansone) retained Foresight Consulting, Inc. and CHM Roof Consultants, Inc. to inspect the shopping center roofs. Docket No. 365-6, ¶13.

Sansone hired these third parties to inspect the roofs and make recommendations as to the maintenance and conditions. None of the hired inspection services companies recommended removal of scupper guards installed by the original contracting parties. Docket No. 308, ¶25.

In 2001, Sansone hired CHM to inspect the Cool Springs Pointe roofs, where the SA building was located. Scott Christeson of CHM with nearly 35 years combined experience as a roofer, roof inspector and roof consultant, inspected the roofs in August 2001. A strong

thunderstorm rolled in during his inspection of the SA roof, causing a heavy downpour for several minutes. When Mr. Christeson resumed his inspection several minutes following the conclusion of the thunderstorm, he found that the rain water had drained from the roof and that there was no standing water or ponding on that roof. Docket No. 308, ¶73.

As a result of his observation of the roof completely draining following a heavy thunderstorm, Mr. Christeson determined that the SA roof drained adequately. Docket No. 308, ¶75.

On May 7, 2003, Chris Woods of Sansone reported in an email to DDR that she had spoken with the roof consultant who inspected the roof the week before the collapse and was advised that the roofs were “in good shape” and “the roof drains were clear.” In a separate email the same day, Ms. Woods also advised DDR, “The fire department also checked all other roof and drains at the center” on the morning of the roof collapse. Docket No. 308, ¶14.

Mr. Elliot Buss, who worked as a carpenter and roofer before becoming a roof inspector, was the Foresight inspector who walked the SA store roof on April 29, 2003, six days before the partial roof collapse. Docket No. 308, ¶85.

Prior to inspecting the Cool Springs Pointe roofs, Mr. Buss had performed more than 400 roof surveys on behalf of Foresight. Docket No. 308, ¶42.

Mr. Buss’s training includes taking 2 years of construction management courses at the Belleville Area College. While a roof inspector, he attended approximately three to four Roof Consulting Institute courses per year. Mr. Buss has also attended classes on roofing presented by Carlisle representatives. Docket No. 308 ¶86.

Mr. Buss saw no evidence of ponding on the roof and saw nothing problematic to tell an architect or engineer during his inspection in April 2003. Buss Dep., p. 43-44, 64.

If there had been loose debris that could possibly clog the scuppers, Mr. Buss would have taken a picture of it and put it in his inspection report. Buss Dep., p. 83.

The original drainage system design specifications called for a retainer bar to be placed in front of the scuppers, and any prior testimony of Pieper to the contrary was incorrect and withdrawn by Pieper. Pieper Dep. p. 166-168.

The retainer bars originally installed on the roof scuppers by Holland were considered normal and appropriate; they are not only proper, but necessary. Wright Trial Test. Vol. 4 p. 5-6.

The retainer bars did not violate any code provision. Fitts Trial Test. Vol. 2 p. 41, Pistruì 6/13/13 Aff. ¶ 5, Pistruì 12/16/14 dep. p. 126, Wright Trial Test. Vol. 4 p. 42-43. p. 127.

Curtis Sutton, a Holland employee who has worked in the roofing industry for approximately 15 years, testified that if he found no gravel retaining bars in front of the scuppers on a Holland Roofing-installed, ballasted roof, he would take pictures, send them to the owner, and recommend the installation of gravel stops. Docket No. 308, ¶70.

Jim Stark of Zero Roofing has worked in the roofing industry for approximately 20 years. Prior to joining Zero Roofing, Mr. Stark was the President of Holland Roofing. Prior to that, he served as a journeyman roofer and a project superintendent on roofing projects. Mr. Stark has seen hundreds of ballasted single ply roofs. In his experience, he expects to see a gravel stop or gravel retaining bar in front of a scupper during an inspection of a ballasted roofing system. Docket No. 308, ¶71.

For the roof rebuild, SA hired the original architect Pieper, and the original structural engineer TRC International, Ltd. (“TRC”) involved with the original 1998 design and construction of the building. Docket No. 308, ¶24.

On the roof rebuild, SA, through its various retained building professionals (which included Pieper and TRC), reconstructed the roof with several of the same conditions as the original construction, including the following:

- (a) a ballasted roof system with scuppers was reinstalled;
- (b) the roof slope was not changed – the scuppers on the higher (“D5”) wall remained approximately ten inches higher than the scuppers on the rear (“D6”) wall;
- (c) the number of scuppers (5) was not changed;
- (d) the size of the scupper openings (8” x 16”) was not changed;
- (e) although the original roof design called for three scuppers on the rear (“D6”) wall and two scuppers on the higher (“D5”) wall, this was reversed when the building was originally constructed with two scuppers on the rear (“D6”) wall and three scuppers on the higher (“D5”) wall, this was not changed on the rebuild;
- (f) there was no change concerning the use of only scuppers for the roof drainage system - - no completely separate drainage system (e.g. internal roof drains) was added;
- (g) the structural design “loads” for the roof (50 psf) were not changed;
- (h) scupper retainer bars were reinstalled on the scupper faces (albeit of a smaller size and different configuration than the original scupper bars); and
- (i) there was no change with respect to cricket installation.

Docket No. 308, ¶25.

The architect hired for both the original construction and the roof rebuild project, Pieper, concluded that the roof drainage system design comported with all code and ordinance requirements. In direct response to an inquiry by the City of Brentwood concerning the design of the roof drainage system, Pieper expressly advised the City that the roof drainage system's design was appropriate and met code requirements, partly by incorporating both primary and

secondary drainage systems into "oversized scuppers." The City accepted the design. Pieper dep. p. 117, 123-126, 191, 229, 322, Fitts Trial Test. Vol. 2 p. 29, 34, 59 Pistrui 6/13/13 Aff. ¶8 (Also Ex. 387) Pistrui. Dep. p. 60.

An April 22, 1998 letter from Brentwood City ("City") inspector Tim Harrington questioned the architect, Pieper, concerning the drainage design for the roof. Ex. 322.

On April 22, 1998 the architect, Pieper, responded to the City inspector's (Tim Harrington) question regarding the roof drainage; Pieper noted that the scuppers would be "oversized" to prevent them from becoming obstructed. Ex. 127, Harrington dep. p. 17-18.

The City accepted the original roof drainage design as code compliant and thus, the original roof drainage system design met code requirements since the City ultimately decides what constitutes code compliance. Fitts Trial Test. Vol. 2 p. 25, 26, 28-29, 24-28, 59, Pistrui 6/13/13 Aff. ¶7 (Ex. 387).

The City has the discretion and authority to render interpretations of code provisions which are consistent with their spirit and purpose. The City has the power and discretion to allow and accept alternate materials and methods of construction not specifically prescribed by code provisions provided that the alternate materials or methods of construction are the equivalent of any such requirements. Pistrui 6/13/13 Aff. ¶7 (Ex. 387); *see also* Fitts, Trial Test. Vol. 2, p. 28-29, 34, 59.

This Court previously noted: 1) The building was substantially completed in 1998, and SA took possession on September 24, 1998, while DDR did not acquire the property or assume the lease until April 2000; 2) Neither SA nor anyone else raised any complaints that the building had not been built as designed; 3) On November 3, 1998 the Brentwood City authorities approved the building for occupancy, confirming that it was in compliance with code

requirements; and 4) DDR regularly had the building inspected. Document No. 232, (Memorandum op.) p. 19.

DDR did not build, construct or contract to build the SA location and did not acquire an ownership interest in the leasehold until April of 2000, roughly a year and a half after SA began to occupy the leasehold and after construction was completed. Docket No. 308, ¶12.

Before issuing a certificate of occupancy, the City conducts a final inspection on the building and makes its best effort to ensure that the building is constructed according to codes. The City intends for people to be able to rely upon its representation in the certificate of occupancy that a building is in compliance with the codes. Harrington dep. p. 31-32, 36, 55-56.

The intention of the City when issuing a certificate of occupancy is to represent to owners and others that the building is in compliance with the codes and the ordinances. Harrington Dep. p. 55-66.

The City contends that it is reasonable for a purchasing landlord to rely on the City's representation in a certificate of occupancy that the building complies with the codes. Harrington Dep. p. 36.

The reference on the City's 1998 certificate of occupancy that it was "temporary" was only for some minor conditions that needed to be resolved. The City never revoked the 1998 certificate of occupancy. Harrington Dep. p. 104-05.

A building tenant and owner can rely upon the City's representation in its certificate of occupancy that a building complies with all code and ordinance requirements. Fitts Trial Test. Vol. 2 p. 57, Pistrui Dep. p. 74-75.

The City's planning and codes department does not require that a new owner comply with code provisions regarding the original construction or bring an existing building up to present code. Harrington Dep. p. 22, 24-25.

The City does not require a purchaser of existing commercial property to comply with code provisions concerning original building design and construction, and the City has never interpreted any code or ordinance provision as requiring a purchasing landlord to hire an architect or engineer to go back and try to ascertain whether some hidden defect exists that might not comply with a code provision. Harrington (City Building Inspector) dep. p. 22, 23-24.

A purchasing landlord has no obligation under the codes or city ordinances to upgrade a building to comply with any new code provision if the owner is not doing renovation work or original construction work. Harrington Dep. p. 24.

The City has never enforced any ordinance or code provision against a purchasing landlord for a failure to comply with any requirements under the codes in the absence of either new construction or renovation construction work on the building, and no ordinances or code provisions require that. Harrington Dep. p. 26, 39.

No witness has any knowledge that DDR or any prior landlord was ever aware or advised of any roof defect or of any need to make any significant repairs concerning the roof or its drainage system at any time. Wright Trial Test. Vol. 4 p. 78, 82, Fitts Trial Test. p. 49-50. Cotton 11/5/07 Aff. ¶¶6 – 8.

No complete blocking or complete clogging of any scupper on the subject roof was ever observed or reported either before or after the collapse by anyone during any pre-collapse roof inspections, including the roof inspection performed just one week before the partial roof collapse. Docket No. 308, ¶31.

There is no factual dispute that DDR did not have actual notice that the roof (or any part of the roof) needed to be repaired, maintained or replaced. Docket No. 232, (Memorandum op.) p. 18; Docket No. 341, p. 5.

No evidence was introduced that any type of "due diligence" inspection performed by DDR prior to its assumption of the lease and ownership of the property would have found any problem which led to the cause of the partial roof collapse. Reed Trial Test. Vol. 4 p. 122, 127, 166.

Hendon, the prior landlord, was unaware prior to DDR's closing in April 2000 of any defects, dangerous conditions or deficiency of any kind regarding the roof. Hendon dep. p. 134.

There was no code violation, defect, or dangerous condition associated with the roof drainage system. Pisturi, 6/13/13 Aff ¶5, Pistru Dep. p. 50-53, 126-128.

It was reasonable for the subsequent landlord, DDR, to also rely upon the Carlisle warranty and the City's certification under the certificate of occupancy that the building complied with all code and ordinance requirements, particularly since it was a relatively new building. Hendon Dep., p. 137.

It would be abnormal to see no bar on the scuppers. Stark Dep., p. 152.

No evidence was introduced that any, let alone 4 to 5, of the 5 roof scuppers were completely blocked or clogged with debris at the time of partial roof collapse.

Nothing in the roof inspection reports prepared by CHM and Foresight, including for an inspection performed just one week before the May 5, 2003 collapse, mentioned or alerted DDR to any significant problem with either the roof or its drainage system, let alone any possible danger of an imminent partial roof collapse. Pistru Dep., p. 100.

Foresight's April 29, 2003 inspection report (just one week before the partial roof collapse) warned of no significant problem and included only a single picture of concrete blocks with respect to any debris on the SA roof. The report also advised: "install a gravel guard in front of all the scuppers to keep ballast out of the downspouts." Ex. 24 (*see* photo no. 6 under "Best Buy" portion of report).

On August 9, 2001, Mr. Christensen of CHM Roofing, performed his typical customary roof inspection on the roof. There was a thunderstorm with heavy downpours in the middle of his inspection. He saw no evidence of water ponding on the roof, saw no evidence of debris other than that noted in his report, saw no debris clogging any scupper, and saw no condition of any kind that he considered dangerous. Christensen Dep., p. 16, 49, 69, 78, 80, 85, 87, 101, 110.

Tokio's expert, Mr. Fitts, admitted that a visual inspection of the roof and drainage system would not alert anyone to a code violation or defect, if any, concerning the roof. (*See also* Dickey, Trial Test. Vol. 6, p. 65); Fitts Trial Test. Vol. 2, p. 46-50).

An October 5, 2003 inspection report by Ben Farrow at TRC (structural engineer) noted various construction errors regarding the roof while inspecting the partial collapse, including a lack of construction of bond beam connections at grouted cells. Ex. 160, 276.

For the joist girder that collapsed to have failed solely as a result of the weight load of an excessive water accumulation on the roof, the depth of ponding on the roof would have had to be over 22 inches at the rear (D6) wall. Dickey Trial Test. Vol. 7, p. 42-44.

Hydrological modeling of the roof drainage system by both Tokio's expert (Mr. Allen) and DDR's expert (Mr. Douglass) undisputedly predicted that, even if it is assumed that no water from the rain event escaped or drained from the roof before the collapse: 1) to achieve a theoretical accumulation of water on the roof of 22.4 inches or more, ALL of the five (5)

scuppers on the roof would have to be completely blocked or clogged; 2) even if an 18” water accumulation were sufficient to cause enough weight to collapse the joist girder, 4 and ½ of the 5 scuppers would have to be blocked or clogged (again even if it is assumed that zero water from the rain event drained from the roof before the collapse); and 3) the net effect of the presence of the retainer bars on the scuppers concerning any potential water accumulation on the roof was “miniscule” – a difference of approximately only .10 foot. Allen Trial Test. Vol. 1, p. 118-20; Wright p. 52-53, 57-58, 60-61; Douglass Dep., p. 11-13, 15, 18-20; Ex. 451B (experts’ joint hydrology chart); Ex. 360.

A. Trial Testimony

As discussed above, the bench trial in this action was held January 12-21, 2016. The parties and the Court agreed that the order of proof should be modified to allow Tokio to present its case first, because Tokio bore the burden of proof with regard to whether there were defects in the roof, whether DDR had actual or constructive knowledge of those defects, and whether those defects actually caused the partial roof collapse.

Tokio presented the testimony of eight witnesses at trial. Tokio’s first witness was Davis Nolan, an expert in meteorology. Docket No. 375, p. 6-62. Mr. Nolan was asked to make a meteorological analysis about the weather events in the Brentwood, Tennessee, area for May 4 and May 5, 2003. Docket No. 375, p. 8. He testified that significant rain started at 1:19 a.m. and lasted until 3:32 a.m. *Id.* at 20. There was a tornado path that ended 7.41 miles south of SA. *Id.* at 22. There were also two reports of 60 knot winds (69 miles per hour). *Id.* at 22. One report was about 5.16 miles west of SA and the other was about 11.8 miles southwest of SA. *Id.* He attempted to determine how much rain fell. *Id.* at 34. He looked for nearby rain gauges. *Id.* at 35-44. He left out a second period of rain from 3:32 a.m. to 5:31 a.m. because it was “spotty

intermittent rain.” *Id.* at 45. His estimate was that approximately 2.7 inches of rain was the minimum amount that occurred and 2.87 inches was the median amount that occurred over a two hour thirteen minute timeframe from 1:19 a.m. to 3:32 a.m. *Id.* at 50.

He estimated wind velocities at the SA site of approximately 70 miles per hour. *Id.* at 53. He is aware that a SA employee arrived at 5:30 a.m. and discovered the collapse at that time. *Id.* at 60.

Tokio’s second witness was Thomas M. Allen, an expert in hydrology. Docket No. 375, p. 62-130. He stated in part:

Hydrology from the engineering perspective is the analysis of what happens when rain falls from the sky and hits the earth’s surface; what happens to the rain, is it infiltrated into the ground, does it run off; if it does run off, where does it go, does it cause flooding downstream; and if so, where is that flooding likely to occur.

It’s really just the study of what happens to the rainfall when it hits the earth’s surface.

Docket No. 375, p. 66.

Mr. Allen visited the site twice, in May 2012 and on June 13, 2012. He testified that the SA roof sloped from the front to the back of the building, and that there were “roof drains” at the rear of the building. *Id.* at 73. The technical term for the drains is scuppers. *Id.* There were two scuppers along line D6, and there were three along line D5. *Id.* at 73-74. The scuppers are sixteen inches wide by eight inches high. *Id.* at 74. The scuppers are built into the parapet wall, which goes all the way around the roof. *Id.* at 74-76.

Mr. Allen observed in photographs taken immediately after the roof collapsed that there was a ballast retainer in front of each scupper opening. *Id.* at 77-78. He used the 2.70 amount of water provided by Mr. Nolan and used a computerized model to test different conditions. Mr.

Jim Douglass, the expert hydrologist of DDR, used a different computerized model. The same data was supplied to both Mr. Allen and to Mr. Douglass. *Id.* at 85.

There is no other exit for the rainwater that falls on the roof except through the five scuppers. *Id.* at 91. Mr. Allen and Mr. Douglass looked at several hypothetical scenarios. *Id.* at 95. In one condition, both of the D5 scuppers and all three of the D6 scuppers were fully functioning. Based upon Mr. Nolan's numbers, there would have been 8.8 inches of rain on the roof according to Mr. Allen, or 9.3 inches of rain on the roof according to Mr. Douglass. *Id.* at 95. In another condition, one of the scuppers on D6 would be 100% blocked, with all others functioning. Mr. Allen calculated there would be 11.1 inches of water on the roof, and Mr. Douglas calculated 12 inches of water on the roof. *Id.* at 96. Mr. Allen stated that their respective figures were "relatively close."

In another condition, both scuppers on D6 were 100% blocked. Mr. Douglass calculated 16.2 inches of water on the roof, while Mr. Allen calculated 17.0 inches of water on the roof. *Id.* at 96-97. In another condition, both D6 scuppers were 100% blocked and one D5 scupper was 100% blocked. *Id.* at 96. Mr. Allen calculated 17.5 inches of accumulated water, while Mr. Douglass calculated 16.9. *Id.* at 97. In another condition, four scuppers were blocked 100%. Mr. Allen calculated accumulated water of 18.5 inches, and Mr. Douglass calculated 18.7 inches. *Id.* at 97. If all five scuppers were blocked, 100%, the experts agreed there would have been 22.4 inches of accumulated water on the roof. *Id.* at 97. Mr. Allen also used concrete blocks in his modeling for some of the conditions, because there was such a block in one of the D6 scuppers according to Mark Voll's photograph. *Id.* at 103. That scenario, however, led to a

“minimal” increase in the depths of water on the SA roof as compared to what would have occurred if the blocks were not present. *Id.* at 104.

Mr. Allen concluded that the particular rain event that Mr. Nolan presented to him would happen about once every ten years. *Id.* at 102.

He assumed that the rock ballast obstructed any gap between the bottom of the retainer bar and the bottom of the scupper. Docket No. 375, p. 106.

On cross examination, Mr. Allen testified that he had done five different sets of “modeling work” since 2007. The above discussion was the fifth set of modeling. He did not do any independent investigation to determine whether the scenarios Mr. Wright directed him to run tracked what was actually happening on the roof at the time of the roof collapse. *Id.* at 116. He had no information or evidence that any of the five scuppers were blocked 100%. In his original 2007 modeling, he did not even run a scenario where he assumed 100% blockage of any of the scuppers. *Id.* He only did that because Mr. Wright later instructed him in 2012 to model it with the assumption that one or more of the scuppers were 100% blocked. *Id.* at 116-17.

Moreover, Mr. Allen’s last modeling, in December 2015, was based on an assumption that every drop of the rain event data that he was supplied was assumed to be on the roof. *Id.* at 118. In other words, he assumed for purposes of blockage of any number of scuppers that those scuppers were blocked from the beginning of the rain event and that not one drop of water escaped the roof during the rain event. *Id.* at 118. Mr. Allen agreed that, in order to have a theoretical ponding of eighteen inches of water on the roof, three and a half or four of the five scuppers would have to be completely blocked. *Id.* at 119.

Tokio's third witness was Eric Cason, an expert in "roofing." Docket No. 375, p. 130-66. During his testimony, counsel for Tokio presented a photograph taken on January 27, 1999, and a roof inspection report from CHM Roof Consultants dated October 1, 2001. Docket No. 375, p. 138-39. The inspection had been done on August 9, 2001. The report apparently said something to the effect "clean the roof of all debris," although that comment apparently did not pertain to the SA roof, but that of a different store. *Id.* at 139. Some of the roof inspection reports refer to accomplishing a cleanup of the roof area, but again it is unclear that any of these comments applied to the SA roof. *Id.* at 141. Based upon these photographs, Mr. Cason testified that he did "not believe that the facility had a good roof maintenance program in place." *Id.* at 145. He further testified that he did "not believe that a roof maintenance program existed on the Sports Authority building." *Id.* at 148-49.

Mr. Cason also testified that the kind of scupper bar that was placed on the roof was an "inappropriate application for that area" *Id.* at 150. He further testified that to his knowledge, he had never seen that device used anywhere. *Id.* at 154. Finally, he testified that "personally, [he didn't] care for ballasted EPM roofs." *Id.* at 156.

The Court does not credit the testimony of Mr. Cason with regard to the roof maintenance program, or lack thereof, on the SA store. As discussed above, it is completely unclear that any of the photographs or the inspection reports presented to Mr. Cason were of the SA roof.

On cross examination, Mr. Cason could not recall the year he graduated from high school. *Id.* at 158. He admitted that he had done no analysis as to what caused the roof to collapse; he was not an engineer; he was not an architect; he did not design drainage systems; and he did not do calculations regarding drainage. *Id.* at 158. He admitted that when he does an

ordinary and customary roof inspection, he typically does not do that using any type of architectural or structural drawing. *Id.* at 159. He does not do an analysis of “code” as part of his ordinary and customary roof inspection. *Id.* at 161. One of the photographs he testified about was taken in February 1999, when the complex was still under construction. *Id.* at 161. He then admitted that only one of the photographs Tokio’s counsel had shown him was a photograph of conditions on the SA roof. *Id.* at 165. He has no idea what debris, if any, was on the roof at the time of the actual roof collapse. *Id.* at 165.

Tokio’s fourth witness was Michael Fitts, as an expert in “architecture and code.” Docket No. 375, p. 171. Mr. Fitts is the former State Architect for the state of Tennessee. *Id.* at 169. Tokio’s contention was that the 1991 edition of the Southern Standard Building Code and the 1991 plumbing code controlled the construction and operation of the SA building. Both codes were amended in 1997, but the 1991 versions were controlling on the building at issue. *Id.* at 175. The applicable code provides that “permitting of any building system or plan by any jurisdiction requirements under this code shall be construed – shall not be construed [*sic*] in any court as a warranty of the physical condition of such building system or plan or their adequacy.” *Id.* at 177-78. The appropriate municipal official, however, has leeway to make a judgment as to whether something meets code or not. *Id.* at 179.

Initially, Mr. Harrington of the Brentwood code department raised a question as to the presence of a “secondary drainage system” for the roof. *Id.* at 179-80. The response by the architect, Pieper, was that the scuppers were so large that they would hold both the primary and the secondary water runoff. *Id.* The building official never responded back to that, which is an implication that he agreed with it. *Id.* at 179.

Mr. Fitts testified that two of the five scuppers did not have “enough space to drain what’s required under the code.” *Id.* at 197. He further testified that the ballast retainer bars cut down the scupper capacity into half and that, in his opinion, there was not enough scupper size for any of the scuppers. *Id.* at 197. In other words, he testified that all the scuppers met the code requirements, if there had been no retainer bars. *Id.* at 208-09. With the retainer bars, however, none of the scuppers met the code. *Id.* at 209.

On cross examination, Mr. Fitts admitted that he had never designed any roof drainage system and that he did no calculations with respect to any stresses that might have been imposed on the roof. Docket No. 376, p. 5.

He testified that he was not aware that the original design and construction of the roof called for the scupper retainer bars. Docket No. 376, p. 8-9. Mr. Fitts testified on direct that, with the gravel retainer bars in place, “None of the drains would meet code.” Docket No. 375, p. 209. On cross examination, however, he gave the following testimony:

Q. [by Mr. Schuman] Thank you. Now, you don’t have any opinion as to whether the as-built condition of the scupper guard constitutes some failure to comply with some code requirement, correct?

A. Very simply we did – during my review of the scuppers and their capacities, very simply, in going through all of my calculations, it showed that the scuppers did not meet code for lack of capacity. And the scupper bars can only add to that because they reduce the openings of the scuppers by 50 percent.

Q. But I don’t think you were listening to my question. My question is, you do not have an opinion that the as-built condition with the scupper guard constitutes some failure to comply with some code requirement. Is that correct?

A. That’s – I think that’s correct.

Q. That's what you said in your deposition, right? You said you had no such opinion that the bar, in fact, constitutes some code violation, correct?

A. No, no, I didn't say that.

Q. Take a look at page 61, please, beginning on line 9; 61, do you see that sir? Do you see 61, sir?

A. Yes, sir.

Q. Line 9: do you have an opinion that the as-built condition of a scupper guard constitutes some failure to comply with some code requirement? Your answer was no. Correct?

A. I did answer that.

Q. And I asked you the next question: you don't have such an opinion? Answer: As it applies to code, no. Right? Do you see that?

A. Yes, sir.

Docket No. 376, p. 13-15.

Mr. Fitts had done no analysis as to any possible contributing factor to the partial roof collapse.

Section 1.02.1 of the General Provisions of the code states, "the building official is further authorized to render interpretations of this code which are consistent with their spirit and purpose." *Id.* at 21. Section 102.7 provides in part:

The provisions of the technical codes are not intended to prevent the use of any material or method of construction not specifically prescribed by them. The building official shall approve any such alternate provided the building official finds that the alternate for the purpose intended is at least the equivalent of that provided in the technical codes in quality, strength, effectiveness, fire resistance, durability and safety.

Id. at 21.

He assumes that Mr. Harrington agreed that the design would meet code requirements, and the city later issued a temporary certificate of occupancy. *Id.* at 29-31. That certificate, dated November 3, 1998 (more than one year before DDR acquired the building), states in relevant part:

This Certificate issued pursuant to the requirements of the Standard Building Code certifying that at the time of issuance this structure was in compliance with the various ordinances of the Jurisdiction regulating building construction or use.

Even though the certificate indicates “Temporary – Expires Nov. 18, 1998,” Mr. Fitts is not aware that the city ever revoked the certificate of occupancy. He understands that “basically the City determines what does and does not satisfy their own code” Docket No. 376, p. 38. He acknowledged that the architect, Pieper, and Mr. Pistrui disagree with his opinion that there is a sizing error regarding the scuppers. He thinks that Mr. Wright agreed with him on this issue. *Id.* at 39.

Mr. Fitts inspected the roof in 2012 or 2013, after it was rebuilt. *Id.* at 44. When he walked on the roof, he did not immediately come to any conclusion or opinion about whether there was a code violation. *Id.* at 46. He had to do calculations before he could come to such an opinion or conclusion. *Id.* In fact, his first opinion was that it met codes. *Id.* at 47-48. He ultimately testified that, if a tenant or landlord has a certificate of occupancy, he could rely on that certificate for purposes of occupancy and for the certification that the city says that it complies with the code. *Id.* at 56-57.

Tokio's fifth witness was David Wright, who was qualified as an expert in structural engineering. Docket No. 376, p. 81. He made a visit to the site in June 2003. Docket No. 376, p. 80. On that visit, he noticed the ballast retainer bars, which he characterized as "unusual." *Id.* at 88. He visited the site at least four times. *Id.* at 29-30.

Mr. Wright testified that joists are "typically the primary framing units that holds up whatever roof deck that is on the project." *Id.* at 98. A joist girder is also a structural member, which is intended to support joists. *Id.* It is standard that the joist sits on top of the top of the joist girder. *Id.* The SA building had been framed with joist girders supporting the joists. *Id.* at 103. The joist girders were supported by columns. Around the perimeter, the joists and joist girders sat in "pockets" in the masonry walls. *Id.* at 94-95; 103. He testified, "it's our experience that this is the predominant framing method for retail type stores." *Id.* at 104.

Mr. Wright determined that the joist girder on line DB survived the event, but the joist girder on DC was on the ground and it "was involved in the collapse." *Id.* at 142-43. During his site visit in June 2003, he observed, among other things, the ballast retainer bars in front of the scuppers. He referred to these as "unusual." *Id.* at 154. He observed that the collapse was at the lowest point of the roof, which led him to believe that that was where the water on the roof would tend to migrate. *Id.* at 155. He thought both the DC wall and the south wall were in good shape, and there were no signs of distress in either wall. *Id.* at 156. He also referred to the "metal fabrications" in front of the scuppers as "not a typical application" Docket No. 376, p. 159. He concluded that, in general, the building was very similar to the way it was designed with some exceptions. *Id.* at 163. The architectural drawings had shown three scuppers through

wall D6 and two through wall D5. There were, however, only two scuppers in the wall on D6 and three in the wall on D5.

Vulcraft was the manufacturer of the joists and joist girders. Docket No. 376, p. 165. Mr. Wright found only an early set of Vulcraft submittals. *Id.* at 165. He stated that the Vulcraft information was on his list of desired information that he made in 2003, but by 2005 they still did not have it when they got the documents from Pieper.² *Id.* at 168. He referred to the Vulcraft information as “critical to our understanding of what had been constructed.” *Id.* at 178.

Mr. Wright made a second visit to the site in early 2006, after getting certain drawings in the fall of 2005. *Id.* at 168. Based upon the information he had at the time, he did a report that was dated September 13, 2007. *Id.* at 169. He testified that it appeared that if you “had the scuppers, the two scuppers on D6, obstructed that the water would have to rise to at least fourteen and a half inches to begin to flow out of the scuppers on D5.” *Id.* at 169-70. They did an analysis raising the water level from zero inches to fourteen and a half inches attempting to determine which member would fail first. *Id.* at 173. They determined that the joists that were between line DC and the wall at line DC.5 “was [*sic*] the likely culprit,” not the joist girder. *Id.* at 173.

It was not until 2013, when Mr. Wright finally received the revised Vulcraft submittal that they found Vulcraft had changed several significant joists to make them stronger.

² In his trial testimony, it seemed apparent that Mr. Wright was discussing his own conclusions, although he began using the term “we” concluded or determined. It is clear that Mr. Wright was referring to his conclusions, or conclusions of those who were working with him. “We” clearly does not refer to Mr. Wright and Mr. Dickey (DDR’s expert structural engineer).

Mr. Wright testified that when they redid the math, they determined that their first conclusion was wrong, and that the joist that failed was not the one between DC and DC.5. *Id.* at 173-74. They then were leaning to the conclusion that it was the joist girder on line DC that had failed, not the joist. *Id.* at 175.

The roof deck sits on top of joists, the joist girder is underneath the joists, and the joist girders sit on top of columns or walls. *Id.* at 181. Typically, joists are perpendicular to joist girders, and were in the SA store. *Id.* at 181. The joist girders also sit into “pockets” in the masonry parapet walls. *Id.* at 182-83.

After 2007, the case was put “on hold” until 2011. Docket No. 376, p. 199. When the case resumed in 2011, Mr. Wright asked again for the Vulcraft records. *Id.* at 199-200.

Ragan-Smith did an “as-built survey” in June 2012. *Id.* at 201. A representative of Hawkins Development was there, with a representative of Ragan-Smith, with Ben Pryor, an associate of DDR’s expert structural engineer Mr. Dickey. *Id.* at 201-02. There were also crew people who had to cut holes to be able to look inside the wall without tearing it down. *Id.* at 203.

Following certain depositions and interviews, Mr. Wright submitted a second report dated September 7, 2012. *Id.* at 209. They still did not, however, have the Vulcraft information at that time. As discussed above, they obtained the Vulcraft information in 2013. Thereafter, they decided to analyze the joist girders, specifically the one on line DC. *Id.* at 211. He did a “supplemental report” on April 12, 2013. *Id.* at 212.

Again, the lowest point on the roof is at the intersection of wall D6 and column line DC. Docket No. 377, p. 20. There is a scupper right there. *Id.* at 23.

Mr. Wright determined that the east end of the joist girder on line DC was inserted into the joist girder pocket on wall D6 approximately nine inches. *Id.* at 74. He stated, “the end of this girder, if you looked at this, you could not see 9.06 inches of the girder because it would be inside the wall.” *Id.* at 75. He did a design check to make sure that there were no deficiencies in the construction of the masonry wall itself, and he found none. Docket No. 377, p. 75-76. The part of the joist girder that was inserted into the wall approximately nine inches would have sat on a steel plate. *Id.* at 77.

The steel plate had headed studs (bolts with heads on them), that were inserted down into the grout and built into the masonry wall. *Id.* at 77-78. The steel plate is on top of a bearing cap. *Id.* at 79. The bearing cap should have been made out of concrete, according to TRC’s drawings, but it was not. *Id.* at 82. It was made out of normal masonry construction materials, which would include concrete masonry units filled with grout. *Id.* This difference, however, was not significant. *Id.* at 83.

Mr. Wright testified to other calculations he made, many of which had nothing directly to do with the failure at issue. He finally discussed a concept known as “flexural torsional buckling.” He did a calculation and determined that approximately 95,000 pounds of force would cause a failure of the joist girder on line D6. When a flexural torsional buckling failure occurs, there is a twisting action that occurs. *Id.* at 109. He testified that with eighteen inches of water, “we’re right there at two percent of the failure point of this girder.” *Id.* at 114. He then apparently added in some factors for dead loads and live loads, and then added an analysis for the effect of “ponding.” *Id.* at 117. He explained that ponding is “unique” because as the water loads the member and it deflects, that deflection creates a bigger basin, so more water can flow

in.” *Id.* He could not do a true ponding analysis until April 2013 when he got the Vulcraft materials. *Id.* at 118. He concluded that, if the water were eighteen inches deep, that would be approximately ten percent over the theoretical maximum carrying capacity of the joist girder that failed. *Id.* at 119.

Mr. Wright finally stated his opinion as to what caused the damage as follows:

I do believe this damage was caused by the failure of the joist girder on line DC that allowed the joist between line DB and DC and the joist between DC and D5 and all of the things that they supported, including the rooftop unit, the roof hatch, the roofing, and the ballast, to collapse into that hole.

Id. at 164. He further testified that the failure was caused by “an excessive accumulation of rain water.” *Id.* at 165. His opinion was that the failure mechanism on the joist girder was most probably a “flexural torsional buckling failure of the top cord of the joist girder on line DC from column line D5 to D6.” *Id.* at 166.

Mr. Wright testified on cross examination that retainer bars are normal, appropriate and necessary in front of scuppers on a ballasted roof. Docket No. 378, p. 5-6. He agreed that, in his initial report, he did not conclude that any of the scuppers on the SA roof were completely or entirely blocked. *Id.* at 13. He testified in his deposition, “I don’t know if there was a partial blockage, a full blockage or anything else, so it’s impossible for me to predict exactly what the depth of the water was at the time of the collapse.” *Id.* at 14. He is aware of no evidence to support a conclusion that any of the five scuppers on the SA roof were blocked. *Id.* at 14. He further gave the following testimony:

Question: Can you conceive of other alternative causes whether you believe or don't believe other than the blocked scupper causes ponding causes weight, causes collapse?

Answer: Not based on the evidence.

Id. at 15.

He testified that, because he believed and concluded that the water weight caused the failure, and that there was no other live load than water weight, based on what he called "reverse engineering," there must have been a sufficient amount of water to cause the roof to collapse. *Id.* at 18-19.

He agreed that a certificate of occupancy (such as Ex. 236) is a representation by the City that it is certifying the building as being in compliance with whatever ordinances or code provisions apply to that building. *Id.* at 20.

Mr. Wright did an initial report dated September 13, 2007, which he later withdrew. *Id.* at 24. In that report, he erroneously concluded that the member that failed causing the partial roof collapse was not a joist girder, but rather a joist. *Id.* at 24. His first report stated in part, "I have determined that defects in the design, construction and maintenance of the subject property resulted in dangerous and unsafe conditions that led to the collapse." *Id.* at 26. His report further stated, "based on my calculations, it is my finding that certain elements of the roof structure in the area of the collapse would approach or exceed one hundred percent of their ultimate capacity." *Id.* at 26-27. His first report also stated that a depth of water of approximately 14.5 inches against wall D6 was sufficient to cause the collapse. *Id.* at 27. He withdrew the report because that conclusion was incorrect as to the amount of water and the specific number he identified. *Id.* He testified that, at the time he prepared the first report, he

did not yet have “critical documents and information from Vulcraft” *Id.* at 27. He did not, however, mention in his first report that he needed those additional documents. *Id.* at 28-29.

In his second report, dated September 7, 2012, he came to different conclusions. *Id.* at 30-31. He concluded that the cause of the roof collapse was not a joist, but a joist girder. *Id.* at 31. He testified that, at the time of the second report, he had significantly more information. *Id.* at 31. He had a reasonable estimate of the rain event, a hydrolic model, and an as-built survey. *Id.* He still did not have the Vulcraft information. *Id.*

In his second report, he also concluded that the scuppers on the roof constituted secondary drains. *Id.* at 31-32. He further concluded that he was wrong in his original report when he referred to 14.5 inches of rain as a significant amount that would cause the roof to collapse. *Id.* at 34-36. He replaced his prior report because it was “inaccurate.” *Id.* at 37. He also made two mathematical errors in his first report which Mr. Dickey (DDR’s expert structural engineer) pointed out to him. *Id.* at 38. He again referred to the fact that, at the time he did his second report, he had not received the Vulcraft drawings. *Id.* at 38. He did not mention that, or his need for the Vulcraft drawings, however, in his second report. *Id.* at 39. He is aware that joists and joist girders are generally over-designed to be stronger than they need to be. *Id.* at 40. He said nothing in his first two reports about improper sizing of scuppers. *Id.* at 43-44. He testified that he agreed with Mr. Fitts on his opinion that a retainer bar, in and of itself, is not a code issue. *Id.* at 43. He agreed that the connection on the rear wall was not built according to the design in the plans. *Id.* at 45. Specifically, the concrete cap that was supposed to be constructed into the wall was not constructed properly, and it was not there. *Id.* at 45. He agrees that there were several construction errors associated with the construction of the roof. *Id.* at 45.

Mr. Wright again revised his analysis and submitted a third report, concluding that 18 inches was the threshold amount of water necessary to cause the collapse. *Id.* at 46. In the last month before trial, he revised that number and concluded that 17 to 18 inches was enough water to cause the collapse. *Id.* at 47. He agreed that both expert hydrologists (Mr. Allen and Mr. Douglass) had concluded that, in order to have 18 inches or more of rain on the roof, four to four and a half of the five scuppers would have to be blocked 100%, from the beginning of the storm. *Id.* at 52.

He has no evidence that there was any water on the roof before the rain event. *Id.* at 52. He is aware that a CHM inspector inspected the roof about a year and a half before the collapse. *Id.* at 52. During that inspection, there was a heavy rain and a heavy thunderstorm. *Id.* at 52-53. The inspector had to exit the roof because of the rainstorm, he came back up after the rainstorm and said that the roof drained properly, and that there was no evidence of any ponding. *Id.* at 53.

He further understood Mr. Allen's conclusion that the difference between the situations with or without the scupper bars on all five of the scuppers was very minimal. He has no reason to doubt the conclusion of the hydrologists that to reach a theoretical amount of 18 inches of water or more, assuming every drop of water of the storm event was on the roof and that none of it escaped, four to four and a half scuppers out of the five would have to be one hundred percent blocked. *Id.* at 60-61.

He agrees that if a scupper is blocked one hundred percent, it does not matter what kind of scupper bars might be present. He testified as follows:

Q. In other words, if they are blocked, they are blocked, right?

A. That's correct.

Q. So, in other words, we can essentially forget the bars in terms of a problem or cause of the roof collapse because you are assuming – in the models at least it's assumed – there's a one hundred percent blockage of one or more scuppers, correct?

A. I don't agree with that.

Q. You don't agree, sir, that it's really not about the bars, sir; is that correct?

A. It's about the obstruction.

Q. Okay. Your view is simply that based on the size of a bar, a bigger bar versus a smaller bar might have a greater probability of one hundred percent blockage, and that's it, right?

A. That's correct.

Id. at 62-63.

An ordinary and customary roof inspection such as an annual or semiannual roof inspection that a commercial owner might perform, is different from a “due diligence inspection.” *Id.* at 71. He agreed with the proposition that, “In a normal inspection that's conducted by an owner, let's say an annual roof inspection where they hire your average roof consultant or roof inspector, you wouldn't expect them to uncover what you are calling this water weight requirement problem” *Id.* at 72-73.

Mr. Wright is aware that SA rebuilt the roof after the collapse, with the five scuppers of the same size in the same locations. *Id.* at 73. He finds no fault with the way SA rebuilt the roof. *Id.* at 80. He agreed that it was reasonable that SA relied upon the design professionals when it rebuilt the roof. *Id.* at 80. SA had no obligation to go out and hire another architect or another engineer to perform an analysis to second-guess the analysis of their professionals. *Id.* at 81.

His last report was dated April 12, 2013. *Id.* at 83. He continued to conduct further analysis, however, even after the third report. *Id.* at 83. He finally finished his analysis on Monday of the week of trial, which would have been the day before the trial started. *Id.* at 84.

He first mentioned his current theory of failure, flexural torsional buckling, in his third report. *Id.* at 86.

When he finally got the Vulcraft documents in the spring of 2013, he learned that the joist girder as designed was actually a little more than forty-four percent stronger than he had originally thought. *Id.* at 89.

Finally, he agreed that “the occurrence of a finding of a roof drainage problem very rarely ever happens in the real world” *Id.* at 89.

Tokio’s next witness was Bruce Reed. Docket No. 378, p. 115. DDR objected to Mr. Reed’s testimony under Rules 702, 703, and 704 of the Federal Rules of Evidence. *Id.* at 117. DDR argued that the Sixth Circuit in *Tokio I* held that the duties of DDR began only when it acquired an ownership interest in the property in April of 2000. DDR argued that Tokio was essentially attempting to bring in a local commercial real estate agent to render a purported expert opinion about the purported custom and practice in the industry regarding due diligence.

The Court allowed Tokio to make a proffer with regard to the testimony of Mr. Reed. *Id.* at 131. Mr. Reed has been a commercial real estate agent for more than thirteen years. *Id.* at 133. The Court certified Mr. Reed, provisionally, as an expert in the field of commercial real estate, and specifically “an expert with knowledge of custom and practice with respect to the purchase of commercial properties in middle Tennessee.” *Id.* at 146. It is, however, unnecessary to discuss Mr. Reed’s testimony in detail. His testimony essentially was that purchasers have a

“due diligence” obligation to inspect the property. *Id.* at 138-39. He stated, however, that this “obligation” was “actually the right to inspect the property in all phases.” *Id.*

Mr. Reed’s testimony was nothing more than that many, or most, purchasers of commercial real estate *choose* to undertake some kind of inspection of the premises, not that they have any duty to do so. *Id.* at 142. He said absolutely nothing, however, about any *duty* of a purchaser of commercial real estate to undertake any kind of pre-purchase inspection. He admitted that he is not an expert with regard to roofs. *Id.* at 150, 163. He was unable to point to any specific piece of evidence that a “due diligence” inspection would have uncovered, except for stating: “I know that my understanding of the case is that the drainage of the roof is not proper and that should have been discovered if someone did the world’s best inspection of the building.” *Id.* at 168.

Mr. Reed’s testimony was completely unhelpful to any issues before the Court.

Tokio’s last witnesses were George Kramer and Jeffrey Williams, both damages experts. For reasons that will be discussed in greater detail, the Court need not consider their testimony.

DDR called only two witnesses: (1) William Dickey, a structural engineering expert, and (2) Ryan Reilly, a damages expert. Mr. Dickey has been doing structural engineering forty-seven to forty-eight years. Docket No. 380, p. 45. He became involved in the instant case in 2007, and he made a site visit to view the roof. *Id.* at 46. By then, the roof had been rebuilt. *Id.* at 47. His first task was to review a 2007 report by Mr. Wright and respond to it. He was generally asked to analyze what caused the partial roof collapse. *Id.* at 48. He was also to analyze Mr. Wright’s analysis of what *he* thought caused the roof to collapse. *Id.* He also worked with DDR’s expert hydrologist, Mr. Douglass. *Id.* at 48. Mr. Dickey was asked if he came to any conclusions as to what he believed caused the partial roof collapse, and he stated in

part, “It’s important to understand, nobody knows the cause.” *Id.* at 50. The material that collapsed from the roof had been removed within several days of the incident. *Id.* at 50. When asked to state his opinion, he testified:

Okay. My opinion is that there were reportedly numerous construction errors associated with how the joists and joist girders were fastened to the masonry wall. The only hard evidence that I have seen at all is a picture of the masonry wall. We’ve had it up on the screen before. Yes, it would be that. I think we’re calling that the pocket where the joist girder on the DC line sat in the D6 wall. That is the only evidence we have of any hard evidence of a failure.

Id. at 51.

Like Mr. Wright, Mr. Dickey initially thought the strength of the joist girder was forty-four percent less than it actually turned out to be. *Id.* at 53-54. The joist girder installed was designed for a 12.6 kips (12,600 pounds) vertical load. *Id.* at 53.

The original drawings prepared by TRC, the original designer, called for a ten inch concrete block to be in place for the joist girder at issue to sit on. *Id.* at 54. They later learned, however, that the ten inch concrete block had not been put in. Instead, the masonry contractor put the joist in on a grouted masonry block. *Id.* at 54.

Mr. Wright had said earlier that the concrete was there, and that he could see the reinforcing steel that was supposed to be in the concrete. *Id.* at 55. He also said he could see aggregate, which told him that the concrete was there. *Id.* Mr. Wright later learned, however, from the masonry contractor, that the reinforced concrete block was not there. *Id.*

The block that should have been there was a reinforced concrete block, a special reinforced concrete block with rebar and stirrups in it “for shear.” *Id.* at 58. It would have been

much stronger as a support for the joist girder if it had been there. *Id.* at 58. He believes there was a shear failure of the seat which caused the beam to drop. *Id.* at 59.

He also testified that the contractor did not follow the TRC drawing in another respect – he did not put in a “bond beam” to support the joists framed into the wall. *Id.* at 61.

He further testified:

I believe [the joist girder at issue] most likely failed because it fell out of a wall. Others believe that it failed for a variety of other structural reasons associated with load. Always a possibility, were the walls strong enough? Was the material the right grade? When it was erected, did some member get kinked, especially some member that was – compression member. Did it get bent or kinked during the process of erecting it?

...

There was very high winds. There were tornados reported in the area, 70 mile an hour winds, I believe. It is possible with the wind blowing over this roof could have caused the roof to move laterally. It's possible that the wind blowing over this roof could have cause the roof to undulate a little bit, to lift and drop back down, vibrate, if you will, flutter. There's a myriad of possibilities of what could happen with winds of that high degree.

Id. at 63-64.

He candidly admitted that there was some water on the roof, and that some water added to the weight of what caused the collapse. *Id.* at 64.

There would be no possible way that anybody could determine, in advance, that there was a construction error in the connection of the joist girder to the wall, except for destructive testing like tearing out the wall. *Id.* at 64-65. Additionally, Mr. Dickey does not believe there is any way that anyone could determine the construction errors by looking at the original design drawings. *Id.* at 65. He further testified that if one went up on the roof, he would not be able to

see any of the problem, because it was hidden down under the pocket where the joist girder came into the wall. *Id.* at 66.

Mr. Dickey noted that Mr. Wright admitted he was wrong in his conclusion that a joist, not a joist girder, had failed. *Id.* at 68-69.

He also analyzed Mr. Wright's original calculation that there were fourteen and a half inches of water on the roof. *Id.* at 69. He concluded that neither the joist nor the joist girder failed under fourteen and a half inches of water. He stated, "they weren't – they weren't that close to failing." *Id.* at 69.

In his second report, Mr. Wright concluded that the joist girder had failed with approximately eighteen inches of water on the roof. *Id.* at 70. After they got the Vulcraft information, they determined that the joist girder was forty-four percent stronger as built than they had thought it was. *Id.* at 71. Then, Mr. Wright introduced a new failure theory that, according to Mr. Dickey, is from a different code that is not applicable to joist girders. *Id.* at 71. Mr. Wright concluded that the stronger joist girder still failed at about eighteen inches of water. Mr. Dickey did similar calculations and determined that more than twenty-two inches of water would be necessary to cause failure. *Id.* at 71.

Mr. Dickey further concluded that, if an excessive weight of water had caused the failure of any of the roofing members, it would have been a joist, not the joist girder that was forty-four percent stronger than they initially thought. *Id.* at 72-73.

He gave a "real brief summary" of Mr. Wright's changing opinions and conclusions:

He started out, failed the wrong member due to math errors. Then that was pointed out. He shifted to the joist girder and got the right member. And then he got more information about the strength of that joist girder, and that strength went up 44 percent. He then came up with a new failure theory to argue that that joist girder,

although 44 percent stronger, failed at the same load as the weaker joist girder. That's the summary of what I think Mr. Wright is saying.

Id. at 75-76. Mr. Dickey stated that he disagrees. *Id.*

He has never seen any evidence in any photographs of any debris that would totally clog any of the scuppers. *Id.* at 78-79. With regard to debris possibly blocking the scuppers, he testified:

Q. If there was debris on this roof before the collapse, then the suggestion that the scuppers were blocked would be more appealing to you; right?

A. That's a very open-ended question. I could not conceive of the scuppers being 100 percent blocked before the rainstorm started, which is the basis of the hydraulics analyses that have been done. The water estimates from those analyses are all upper-bounds. They all overestimate the water. And unless somebody went out there with pieces of plywood and nailed them over the scuppers, there is no way I can concede [*sic*] of them being a hundred percent blocked.

Docket No. 380, p. 128.

Mr. Dickey was subject to cross examination by counsel for Tokio, but much of it was generally not helpful to Tokio's case. For example, counsel spent a great deal of time showing Mr. Dickey photographs, stating a proposition as to what the photographs showed, and asking Mr. Dickey, essentially, whether he agreed. Mr. Dickey disagreed most of the time.

Mr. Dickey testified that it was "not conceivable to [him] that the scuppers were one hundred percent blocked." *Id.* at 130. He stated in part:

I have no data at all that would give me any indication that two or three or four scuppers would become a hundred percent blocked and put a huge amount of water on this roof and cause the joist girder to collapse under an extreme overload situation, was not something I [*sic*] was going on.

Id. at 138.

He testified:

As we discussed earlier, this was one of the major construction errors. The bearing block was not present. The grouted masonry routed in a concrete block is much weaker. And let's be sure we say I have always referred to this as the most likely failure, and I have always referred to this as this is the only tangible evidence that I have actually seen of what might have failed.

Docket No. 381, p. 15. The concrete block was specified as four thousand pound concrete, with reinforcing in it. *Id.* at 20. He stated, "Four reinforcing bars, number fives I think. And then some stirrups to wrap those bars." *Id.* Again, in a deposition, Mr. Wright said that he could see reinforcing in the drawing. Mr. Wright also testified that he could see aggregate, which is part of concrete, as opposed to simply sand, that is part of grout. He later learned from the contractor that the reinforced concrete block was not there and he recanted those opinions. *Id.* at 22.

Mr. Dickey testified that there was not a "bearing failure" at the joist girder connection to wall D6, at least "in the general sense of how structural engineers talk about bearing." *Id.* at 28. He stated he would call it "more a shearing out of a pocket, or a pocket failure." *Id.*

What it looks to me like is that something moved. Either the joist [girder] was not in the wall far enough, I think quite possibly the bearing plate was too small, and so the – the joist [girder] rested on a much shorter bearing length.

...

I'm saying it appears to me that it was not embedded in the wall properly. A lot of information says the details around the connections of the joists and the joist girders were not built properly. I look at that picture, and it looks to me like it sheared off the front face of the masonry wall because there was not enough bearing to prevent that failure from occurring.

Id. at 31-32.

He further testified:

I believe that the most likely scenario is that the unreinforced concrete masonry sheared as shown in that photograph possibly because the detail was wrong, it was not the – it was not the bearing detail for a joist girder. It was a weaker bearing detail associated with the joist, the two studs we talked about, that sort of thing. It was not a reinforced concrete block that had concrete – or would have steel in it that would have prevented that. That the joist likely was not embedded into the wall anyways near as far as Mr. Wright depicts. The bearing pressures that we drew here most recently, as the girder deflected, it put more load on the front edge of it. These are not things very easy to calculate.

And so I'm not saying I calculated this. And I bet my PE license that this is what happened. I'm saying that this is the most likely scenario based on all the data that I have.

Id. at 48.

DDR's last witness was Ryan Reilly, an expert financial consultant who rendered an opinion on damages. As discussed below, the Court finds it unnecessary to discuss issues related to damages.

Finally, Tokio called Mr. Wright as a rebuttal witness. Docket No. 381, p. 101. He testified that in June 2003, when he visited the site, the cleanup had already occurred. He stated:

So it was easy to see the walls. I inspected the walls to see if there was any cracking, any bowing, any kind of distress, observable in the masonry walls. I did not find any.

I have also been back to the site a number of times. I think four additional times. The walls are always observable. And I have never noticed any distress. And I have also reviewed a lot of the photographs that various people have taken, and have not found any signs of distress in the masonry wall.

In response to this testimony, the Court noted, "When you say there is no distress, what's in [Exhibit] 303 – isn't that distress?" *Id.* at 113. Mr. Wright responded:

I'm sorry, sir. I was meaning the wall itself. You are exactly correct. That's an isolated point on the wall. But I was referring to the wall itself. It goes like 60' long.

Id.

The remainder of Mr. Wright's rebuttal testimony appears to be highly technical, and it is essentially a rehash of his earlier testimony that the cause of the failure was flexural torsional buckling.

III. Conclusions of Law

Tennessee law applies in this diversity action. Docket No. 250 (Sixth Cir. Op.), p. 7.

Resolving disputes regarding interpretation of contract requires this Court to ascertain the intention of the parties based on the usual, natural, and ordinary meaning of the language used. Docket No. 250 (Sixth Cir. op.) p. 7.

Tokio's subrogation claim against DDR seeks to do indirectly what it could not do directly since all claims against the original building professionals for alleged variances between SA's original approved design and specifications and the building's as-built construction (hereinafter "CD") were barred. Under Tennessee law, any claims by SA (and thus by extension, Tokio) against the original architects, engineers or other building professionals were barred by the four-year statute of repose. *See* T.C.A. §28-3-202.

The Sixth Circuit held that the decision in *Marshalls of Nashville, Tennessee, Inc. v. Harding Mall Associates, Ltd.*, 799 S.W. 2d 239 (Tenn. Ct. App. 1990) ("*Marshalls*") requires constructive notice, rather than actual notice. Docket No. 341 p. 7, Docket No. 250 (Sixth Cir. op.) p. 18.

The Sixth Circuit remanded this case to this Court in part to determine whether DDR had constructive notice of any defect in the roof such that DDR could be held liable for a breach of the Lease. Docket No. 250 (Sixth Cir. op.) p. 17.

As a matter of law, there could be no material breach or default under the Lease absent satisfaction of two conditions precedent: 1) notice to DDR, either actual or constructive, of defects for which DDR bears responsibility under the Lease; and 2) a failure to cure those defects within a reasonable period of time after such notice. Docket No. 232 (Memorandum op.) p. 16-17.

Even if DDR had constructive notice of any defect, under Tennessee law, where a tenant's knowledge of a dangerous condition is co-extensive with the landlord's (*i.e.*, equal to or greater than the knowledge of the landlord), the landlord is not liable for injuries sustained as a result of the dangerous condition. *Lethcoe v. Holden*, 31 S.W. 3d 254 (2000), *Denton v. Hahn*, M2003-00342-COA-R3-CV, 2004 Tenn. App. LEXIS 605, 2004 WL 2083711, (Tenn.Ct.App. Sep. 16, 2004).

To prove that DDR had "constructive notice" under Tennessee law, Tokio must demonstrate that DDR had knowledge of a specific dangerous condition. General knowledge that a condition may exist does not constitute constructive knowledge of a specific condition. *See, e.g., Barkley v. Shelby County Bd. of Educ.* 2015 Tenn. App. LEXIS 130 (Tenn. Ct. App. March 18, 2015) (Appellate court reversed trial court holding that defendant had constructive notice since proof of general knowledge that a condition exist was insufficient); *Hardesty v. Service Merchandise Co., Inc.*, 953 S.W.2d 678 (Tenn. Ct. App. 1997).

A claim predicated on constructive notice is barred where a dangerous condition or defect was not created by the owner and the tenant could have discovered it just as easily through

ordinary care. *Maxwell v. Davco Corporation of Tennessee*, 776 S.W. 2d 528, 531–532 (Tenn. Ct. App. 1989); *Lethcoe*, supra.

Where liability is predicated on constructive knowledge of the defendant, the proof must show the dangerous or defective condition existed for such a length of time that the defendant knew, or the exercise of ordinary care should have known, of its existence. *Johnson v. Walmart Stores East, L.P.*, 1:08-CV-67, 2009 U.S. Dist. LEXIS 17297, 12 (E.D. Tenn., March 4, 2009).

Section 102.1 of the 1991 Standard Building Code expressly allows the building official to "render interpretations of this code, which are consistent with their spirit and purpose." Section 102.7 entitled "alternate materials and methods" states: "the provisions of the tactical codes are not intended to prevent the use of any material or method of construction not specifically prescribed by then, provided any such alternate has been reviewed by the building official. The building official shall approve any such alternate, provided the building official finds that the alternate for the purpose intended is at least the equivalent of that prescribed in the tactical codes, and quality, strength, effectiveness, fire resistance, durability and safety." Ex. 138. p. 4, 6.

Where a lease obligates a landlord to maintain and repair the premises, Tennessee law does not impose the "highest degree of care to discover latent defects" or a duty of "constant care and inspection" of the premises; the owner has a duty of only "reasonable care to inform himself of the condition of the property," which does not include discovery of latent defects. *Glassman v. Martin*, 196 Tenn. 595, 601, 269 S.W. 2d 908, 910 (Tenn. 1954).

Constructive notice is "information or knowledge of a fact imputed by law to a person (although he may not actually have it), because he could have discovered the fact by proper diligence, and his situation was such as to cast upon him the duty of inquiring into it." *Kirby v.*

Macon County, 892 S.W. 2d 403, 409 (Tenn. 1994) quoting Black's Law Dictionary 1062 (6th Ed. 1990).

Landlords are not insurers of the premises under Tennessee law. *Allstate Insurance Co. v. Watson*, 195 S.W. 3d 609, 612 (Tenn. 2006); *Memphis Housing Authority v. Thompson*, 38 S.W. 504, 512-513 (Tenn. 2001) (Tennessee Supreme Court rejected contention that a lease provision obligating the tenant to be responsible for all damage to the leasehold whether "intentional or not intentional" could create liability absent some degree of "fault").

A purchasing landlord has no obligation under the codes or city ordinances to upgrade a building to comply with any new code provision if the owner is not doing renovation or original construction work. *Harrington Dep.*, p. 24-27.

This Court previously held that Article 28(A) of the Lease does not provide that DDR would be liable even if any default under the lease caused, in whole or in part, directly or indirectly, the roof to collapse. Docket No. 341, (Memorandum op.), p. 12-13.

In Article 28(A) of the Lease, SA (and by extension Tokio) agreed to hold DDR harmless against any claims "arising within the Tenant's Building, except those which shall result, in whole or in part, directly or indirectly, from the default or gross negligence of Landlord" Docket No. 341, (Memorandum op.) p. 11.

This Court previously held that even if DDR did commit a default, Article 28 of the Lease constitutes a "release" of any such default if it "did not directly or indirectly result in the partial roof collapse." Docket No. 45, (Memorandum op.) p. 20, Docket No. 232 (Memorandum Op.) p. 5.

DDR is not liable under the Lease for any pre-assignment breach of the Lease by the prior landlord Service-Hendon to construct the building in accordance with SA's approved

specifications and design. Docket No. 250 (Sixth Circuit op.) p. 29, 33. (“We ... hold that Developers cannot be held liable for Service Hendon’s [alleged] failure to construct the building in accordance with the lease’s precise specifications because the default occurred prior to the transfer of the lease interest” *Id.* p. 29).

The Lease provides that SA’s building would be designed and constructed in general accordance with SA’s prototypical drawings and specifications submitted by SA. Ex. 172 p. 8-13.

Under the Lease, SA had the right to: a) control the design of the building and approve any changes to the drawings and specifications for the building; and b) approve the final construction of the building prior to accepting the building from the prior landlord, Service-Hendon. Docket No. 250 (Sixth Circuit op.) p. 8-12, Ex. 172 p. 2.

SA had a number of rights and remedies under the Lease if the building had not been “substantially completed in accordance with the approved drawings and specifications. . . and the requirements and provisions of this Lease,” including: a) the right to pay Service Hendon reduced rent; and b) the right to terminate the lease, which SA never invoked. Docket No. 250 (Sixth Cir. op.) p. 35; Ex. 172 p. 12-13, 16-19.

Although SA may have had no obligation to inspect the roof in order to ensure that it was in good repair, it nevertheless had an obligation under the lease “to inspect the property to ensure that it conformed with the contractual specifications prior to occupancy.” (*See* suggestion by Sixth Circuit) Docket No. 250 (Sixth Cir. op.), p. 35. Ex. ¶11(B).

Tokio’s Third Amended Counterclaim against DDR is predicated upon alleged CD. Docket No. 271 (Third Amended Counterclaim at ¶16-36) (*see, e.g.*, “The Roof Defects caused the SA roof to collapse. . . .” ¶35; “DDR failed to identify and correct the Roof Defects.” ¶36).

DDR had no pre-assumption-of-lease duty to conduct a detailed engineering or architectural analysis of the roof or its drainage system to “ensure” there was no CD. Docket No. 250 (Sixth Circuit op.) p. 33.

As between DDR and SA, only SA performed any construction/renovation work on the building when it rebuilt the roof. Thus, only SA was obligated under the Lease to comply with all applicable building code and ordinance requirements as part of SA’s construction/renovation work. Ex. 172 Article 15(B)(i), 15(B)(iii) 17, Article 19(C) p. 32-34, 35, 36-37, Ex. 172 p. 36.

No requirement, rule, order or regulation of any municipal, state or federal governmental entity required DDR to make any “structural or non-structural changes” of any kind to the building following DDR’s acquisition of its ownership interest in the building in April 2000. Ex. 172, Article 17.

No provision of the Lease indicates that the original contracting parties intended to obviate or supplant the well-established general rule under Tennessee law that landlords are not liable for defective conditions at the leasehold absent actual or constructive notice. Ex. 172.

The Sixth Circuit affirmed this Court's order granting summary judgment on Tokio's claims that DDR was liable for the prior landlord's alleged failure to construct the building in accordance with Articles 6(F) and 12(A)(II) of the Lease. All of Tokio's remaining breach of lease claims against DDR are based solely upon DDR's alleged conduct, not any alleged conduct of Service-Hendon. Thus, as a matter of law, DDR could have no liability for any pre-assignment breach by Service-Hendon. Docket No. 271 (Tokio's Third Amended Counterclaim); Docket No. 250 (Sixth Cir. op.) p. 33.

Tokio bears the burden to prove: 1) that any "code violation" or roof defect was a "default"; and 2) that any such default directly and proximately caused the partial roof collapse. Docket No. 341 (Memorandum op.) p. 12-13.

DDR only assumed any obligation under the Lease after it acquired its ownership interest in the building and assumed the Lease in April, 2000; DDR had no pre-assumption-of-lease duty to its prospective future tenant, SA, and owed no duty to SA to perform any type of "due diligence" inspection of the building prior to assuming the Lease. Docket No. 250 (Sixth Circuit op.), p. 33, Wright Trial Test. Vol. 4 p. 68-70.

As a matter of law, DDR had no Lease duty to perform destructive testing or conduct expensive investigations to try to determine possible unknown CD as part of its general Lease duty to maintain and repair the premises.

As a matter of law, SA (and thus by extension Tokio) waived any claim against DDR for breach of the Lease based on any original CD because SA: a) supplied and approved the building's design and specifications; b) inspected the building and made various punch list demands (including demands to "install scupper bars") to correct construction deficiencies before occupancy; c) accepted the building at the time of occupancy after its inspections; d) never invoked any of its lease rights or remedies for any CD (*e.g.*, the right to pay reduced rent or terminate the lease); and e) occupied the building for nearly a year and a half "without complaint" – all before DDR acquired any ownership interest and assumed the Lease. (*See* Sixth Circuit's suggestion), Docket No. 250 (Sixth Cir. op.) p. 35, Ex. 172.

Tokio's structural engineer, Wright, opined only that the cause of the roof collapse was an "excessive water accumulation," but neither he nor any of Tokio's other experts offered an opinion or any other evidence as to what caused the purported "excessive water accumulation."

Tokio's architect and code expert, Mr. Fitts, its roofing expert, Mr. Cason, and its hydrology expert, Mr. Allen, all offered no opinions concerning what caused the collapse. Indeed, Tokio's own experts testified that the original scupper design and the scupper bars satisfied code requirements and were accepted by the City. Thus, Tokio failed to meet its burden as to ANY causation whatsoever, let alone its burden to establish direct and proximate causation from any "default" under the Lease by DDR.

Tokio's claim against DDR for breach of the Lease is based upon a theory of subrogation; Tokio "stands in the shoes" of SA to the extent of the payment made by Tokio to SA and, thus, Tokio has no greater rights than SA would have, if any, had SA sued DDR for breach of the Lease. Docket No. 45, (Memorandum op.) p. 17.

As a matter of law, there can be no "code violation" concerning a design approved by the City since under the codes, the City has discretion and authority to accept alternate materials provided the spirit of the code requirements are met. Thus, the City itself effectively determines that a design is code-compliant by the City's acceptance of a design. Ex. 603, §102.1, 102.7 Fitts Trial Test. Vol. 2 p. 35-36, 56-57.

No Lease provision, including those regarding maintenance and repair (see Lease Article 14) indicates that the intent of the original contracting parties was to make any "landlord" an insurer or guarantor of the premises beyond the original landlord's "unconditional guarantee [of] all work performed . . . against defective workmanship and materials" – albeit for only one year. No Lease provision creates a duty on the part of DDR to act as an insurer or guarantor of the premises for the duration of the Lease. Docket No. 172, Article 8 p. 13, 25-27.

Tokio essentially asserts that DDR was obligated under the Lease to guarantee the condition of the premises for the duration of the Lease which would render the one-year Lease guarantee provision in Article 8 superfluous.

DDR committed no material breach of the Lease and did not default under the Lease since it had neither actual nor constructive notice or knowledge of any defective condition relating to the original design and construction of the roof and building and DDR had no opportunity to cure any defective condition within a reasonable period of time.

Even assuming, arguendo, that DDR did commit a material breach or default under the Lease, Tokio failed to show that any breach or default was the direct and proximate cause of the roof collapse.

DDR had no actual or constructive notice of any patent or latent defect concerning either the roof or its drainage system, if any, and thus, DDR had no actual or constructive notice of any defect or of any need of repairs.

Absent destructive testing, DDR did everything it reasonably could to inspect and maintain the roof drainage system. Pistrucci dep. p. 101.

Tokio did not meet its burden of proof concerning: a) any loss or damages allegedly incurred by SA; b) any loss caused by the partial roof collapse; or c) any breach or default of any lease duty owed by DDR to SA.

Even if in fact: a) the roof collapse was directly and proximately caused by the weight of an excessive water accumulation; and b) it was due to the blocking or clogging of all or most of the roof scuppers, there still would be no reason DDR should have known that any such conditions might occur or that the roof or any aspect of it was in need of repair.

Tokio's own experts agree that the retainer bar did not violate any code or ordinance and Tokio introduced no evidence that the retainer bars either:

- a) were a "defect," or
- b) caused the roof to collapse. *See, e.g.,* Wright Trial Test. Vol. 4 p. 5-6, 62-65, Fitts Trial Test. Vol. 2 p. 13-15, 26, 41, Ex. 360 (Allen Chart No. 10).

SA's "Tenant Estoppel Certificate" supplied to DDR in December 1999 bars any breach of Lease claim by SA (and thus by extension Tokio) against DDR based upon any alleged patent defect concerning the original design or construction of the building. Ex. 220.

IV. Discussion

The key witnesses in this case were the two expert structural engineers, Mr. Wright and Mr. Dickey. The Court had the opportunity to observe both witnesses at the trial. Based upon the Court's observations, Mr. Dickey was clearly the more credible witness. Mr. Wright, on numerous occasions, testified contrary to previous deposition testimony. He also attempted to evade questions asked of him by DDR's counsel. He often spoke in highly technical terms, without explaining his testimony in a logical, coherent, and understandable manner.

Mr. Dickey, on the other hand, attempted to fairly answer the questions put to him by Tokio's counsel. His testimony was concise and to the point.

Additionally, as discussed above, Mr. Wright changed his theory several times during the course of this case. He changed his first report after Mr. Dickey pointed out that there were mathematical errors in his calculations. He attempted to explain some of his changes, arguing that he did not have the benefit of the Vulcraft drawings when he made his conclusions. If the drawings had been that important, it seems logical to the Court that Mr. Wright would have

either mentioned that it was important for him to review the Vulcraft documents or that his testimony was somehow conditional on the documents showing some significant information.³

In order for DDR to be liable to Tokio, Tokio would have to show notice to DDR, either actual or constructive, of defects for which DDR bears responsibility under the lease and a failure to cure those defects within a reasonable period of time after such notice. The parties agree that DDR did not have actual notice of any defective condition. Moreover, Tokio has not shown by a preponderance of the evidence that DDR had constructive notice of any defective condition. Any defects in the part of the joist girder that was anchored into the wall were not visible. The same is true with regard to the lack of a reinforced concrete block.

Even assuming for purposes of argument that DDR did commit a material breach or default under the Lease, Tokio failed to show by a preponderance of the evidence that any such breach or default was the direct and proximate cause of the roof collapse or any damages suffered by Tokio.

Additionally, Tokio did not show by a preponderance of the evidence that there was any “code violation” in connection with the SA building, or that any such default directly and proximately caused the partial roof collapse. As discussed above, Tokio’s structural engineer, Mr. Wright, testified that the cause of the roof collapse was an “excessive water accumulation,” but neither he, nor any of Tokio’s other experts, offered an opinion or any other evidence as to what caused the purported “excessive water accumulation.” Tokio’s architect and code expert, Mr. Fitts, its roofing expert, Mr. Cason, and its hydrology expert, Mr. Allen, offered no opinions

³ Insofar as the Court is aware, there is no explanation anywhere in the record for Tokio’s failure to obtain the Vulcraft documents until April 2013, almost ten years after the incident that is the subject of this action occurred.

concerning what caused the collapse. Tokio's own experts testified that the original scupper design and the scupper bars satisfied code requirements and were accepted by the city.

Mr. Wright candidly admitted that, using what he called "reverse engineering," he concluded that the weight of the water caused the roof to collapse, and therefore concluded that there must have been some defective condition that caused the excessive accumulation of water.

No provision of the Lease creates a duty on the part of DDR to act as an insurer or guarantor of the premises for the duration of the Lease. Tokio essentially argues that DDR was obligated under the Lease to guarantee the condition of the premises for the duration of the Lease. Such a situation, however, would render the one-year Lease guarantee provision in Article 8 superfluous.

V. Conclusion

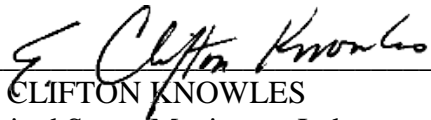
For the foregoing reasons, Tokio's claims against DDR will be DISMISSED, the Court finding and concluding that DDR is not liable to Tokio for any damages that may have been the result of the partial roof collapse.

DDR is entitled to a declaratory judgment that it is not liable to Tokio for any damages caused by the partial roof collapse, and that DDR has no duty to pay Tokio for any subrogated amounts.

In view of the foregoing, it is unnecessary for the Court to discuss the issue of damages, or the testimony relating to that issue.

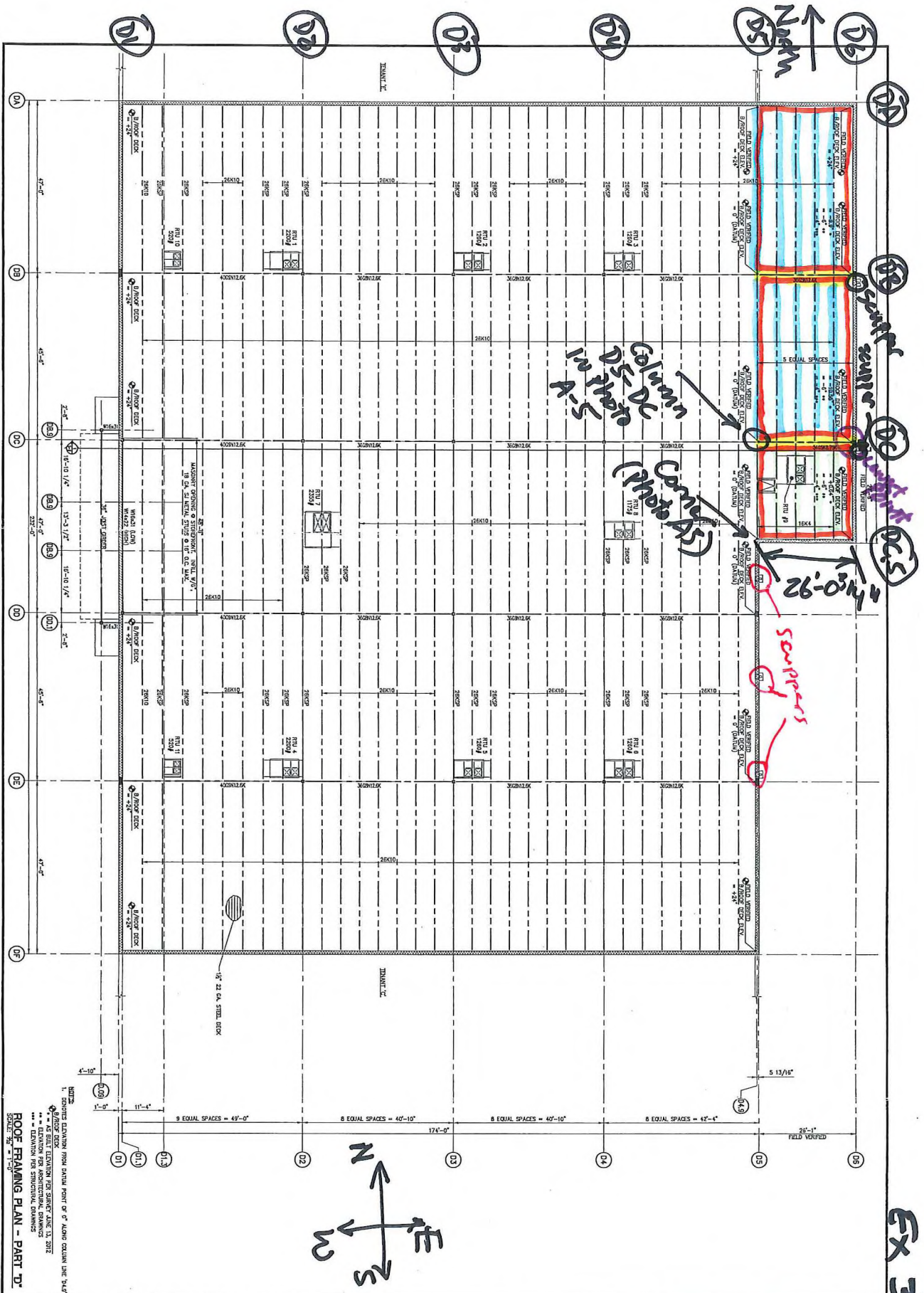
An appropriate Order will be entered.

IT IS SO ORDERED.



E. CLIFTON KNOWLES
United States Magistrate Judge

APPENDIX



**THE SPORTS AUTHORITY
AT COOL SPRINGS POINT**
MOORES LANE
BRENTWOOD, TN

Roof Framing Plan - Part 1

Scale: 1/8" = 1'-0"

Notes:

- 1. ROOF DECK ELEVATION FROM FINISH FLOOR OF 0' ALONG EXISTING LINE 1/4"
- 2. RAFTER ELEVATION FROM FINISH FLOOR OF 0' ALONG EXISTING LINE 1/4"
- 3. JOIST ELEVATION FROM FINISH FLOOR OF 0' ALONG EXISTING LINE 1/4"
- 4. ELEVATION FOR ARCHITECTURAL DRAWINGS
- 5. ELEVATION FOR STRUCTURAL DRAWINGS

Sheet Number: **S-1**

Roof Framing Plan

Scale: 1/8" = 1'-0"

USE 2012 RPT, Exhibit 366 Attachment 1

EX 366 ATTACH 1